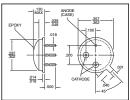
OD-100 Wide Angle TO-46 Pkg 880nm Emitter



FEATURES

- · Ultra high power output
- Four wire bonds on die corners
- · Very uniform optical beam
- Standard 3-lead TO-39 hermetic package
- Chip size .030 x .030 inches

All surfaces are gold plated. Dimensions are nominal values in inches unless otherwise specified. Two cathode pins *must be* externally connected together.

ELECTRO-OPTICAL CHARACTERISTICS AT 25°C

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PARAMETERS	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Total Power Output, Po	I _F = 500mA I _F = 10A	80	100 1300		mW
Radiant Intensity, I _e	I _F = 500mA		60		mW/sr
Peak Emission Wavelength, λ _P			880		nm
Spectral Bandwidth at 50%, Δλ	I _F = 50mA		80		nm
Half Intensity Beam Angle, θ			110		Deg
Forward Voltage, V _F	I _F = 500mA		1.65	2	Volts
Reverse Breakdown Voltage, VR	I _R = 10μA	5	30		Volts
Capacitance, C	V _R = 0V		90		pF
Rise Time			0.7		изес
Fall Time			0.7		изес

ABSOLUTE MAXIMUM RATINGS AT 25°C CASE

Power Dissipation ¹	1000 mW
Continuous Forward Current	500mA
Peak Forward Current (10µs, 400Hz) ²	10A
Reverse Voltage	5V
Lead Soldering Temperature (1/16" from case for 10sec)	240°C

¹Derate per Thermal Derating Curve above 25°C ²Derate linearly above 25°C

THERMAL PARAMETERS

Storage and Operating Temperature Range	-55°C to 100°C
Maximum Junction Temperature	100°C
Thermal Resistance, R _{THJA} 1	145°C/W Typical
Thermal Resistance, R _{THJA} ²	75°C/W Typical

¹Heat transfer minimized by measuring in still air with minimum heat conducting through leads ²Air circulating at a rapid rate to keep case temperature at 25°C

